

ABSTRACT

To provide a source driver circuit for an EL display panel with reduced variations in output current.

A source driver circuit contains unit transistors 634 each of which constitutes a single unit.

The 0th bit consists of one unit transistor 634, the 1st bit consists of two unit transistors 634, the 2nd bit consists of four unit transistors 634, the 3rd bit consists of eight unit transistors 634, the 4th bit consists of 16 unit transistors 634, and the 5th bit consists of 32 unit transistors 634.

Each unit transistor 634 composes a current mirror circuit in conjunction with a transistor 633a.

Regulating the current I_b flowing through the transistor 633a allows for changing the current flowing through the unit transistors 634.

Accurate source driver IC with small variations can be provided by configuring output current circuits with unit transistors and regulating reference currents so that the output current of the unit transistors can be regulated.